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Research Article

Prior Military Service, Identity Stigma, and Mental Health Among Transgender Older Adults

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Abstract

Purpose of the Study: Converging evidence from large community-based samples, Internet studies, and Veterans Health Administration data suggest that transgender adults have high rates of U.S. military service. However, little is known about the role of prior military service in their mental health later in life, particularly in relation to identity stigma. In this article, we examine relationships between prior military service, identity stigma, and mental health among transgender older adults.

Design and Methods: We used a subsample of transgender older adults (n = 183) from the 2014 survey of Aging with Pride: National Health, Aging, and Sexuality/Gender Study (NHAS). We employed weighted multivariate linear models to evaluate the relationships between psychological health-related quality of life (HRQOL), depressive symptomatology (Center for Epidemiological Studies Depression Scale [CES-D] scores), identity stigma, and prior military service, controlling for background characteristics.

Results: Identity stigma was significantly related with higher depressive symptomatology and lower psychological HRQOL. Having a history of prior military service significantly predicted lower depressive symptomatology and higher psychological HRQOL. The relationships between psychological HRQOL, identity stigma, and prior military service were largely explained by depressive symptomatology. Prior military service significantly attenuated the relationship between identity stigma and depressive symptomatology.

Implications: By identifying the role of military service in the mental health of transgender older adults, this study provides insights into how prior military service may contribute to resilience and positive mental health outcomes. Directions for future research are discussed.

Keywords: Veterans, Gender identity, Resilience, Depression, Quality of life

Estimating the prevalence of current and former U.S. service members who self-identify as transgender is challenging, yet important to understanding of the effects of military service in this population. The Veterans Health Administration indicates the prevalence of diagnosed gender dysphoria is five times that of prevalence estimates in the general population (Blosnich et al., 2013). Gates and Herman (2014) propose that there are more than 15,000 transgender adults currently serving in the U.S. military. The RAND Report commissioned by the U.S. Department of Defense suggests that of the more than 2.1 million active duty and reserve military personnel, between 2,150 (0.1%) and 10,790 (0.5%) are transgender (Schaefer et al., 2016). Due to the rapidly increasing aging population and the high

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proportion of veterans among older Americans (more than 50%; Hardy & Reyes, 2016), the number of transgender older adults with a history of military service is likely substantially increasing. In a national community-based survey, 41% of transgender older adults reported having previously served in the military (Fredriksen-Goldsen, Cook-Daniels et al, 2013). Still, the impact of military service in transgender lives and their mental health has scarcely been studied and is a significant gap in health disparities research. In light of the Department of Defense's lifting of the ban on transgender individuals serving openly in the U.S. military, the need for this research is imperative.

There are decades of accumulated research on the effects of military service on the mental health of the general U.S. population. Earlier studies tended to focus on the negative impact of military service on mental health, particularly immediately after separation from the service (Whyman, Lemmon, & Teachman, 2011). Recently, studies suggest that military service also has longer-term, salutary effects on mental health (Spiro, Settersten, & Aldwin, 2016; Whyman et al., 2011). Military service has been found to be inversely related to depression; however, the effect completely disappeared within a decade of separation from the service (Whyman et al., 2011). Others report veterans at retirement age enjoyed better overall health than nonveterans, but worse health at older ages (Wilmoth, London, & Parker, 2010). In yet another study, older veteran and nonveteran women had similar cognitive functioning at baseline, yet older veteran women experienced steeper cognitive declines over time (Padula et al., 2016). Along with significant variations in health outcomes related to military service, there is also substantial heterogeneity in military service experiences.

World War II and the Vietnam War were decidedly different. World War II was primarily fought by the Greatest Generation (born 1908–1928; Wilmoth & London, 2016); individuals volunteered and were conscripted across social statuses and age ranges (Hardy & Reyes, 2016). The Vietnam War was fought primarily by Baby Boomers (born 1946–1964), and due to draft deferments that favored the wealthy and better educated, conscripts were more often drawn from socially disadvantaged and younger age groups (Wilmoth & London, 2016). Furthermore, depression is more prevalent among Vietnam veterans than World War II veterans (Davidson, Kudler, Saunders, & Smith, 1990).

Conceptual Framework

This study is guided by the Health Equity Promotion Model (HEPM), which incorporates a life course perspective within a health-promoting framework (Fredriksen-Goldsen, Simoni, et al., 2014). It conceptualizes health (including mental health) as a lifelong dynamic process, situating risk and protective factors within larger sociocultural structures and particular historical eras, continually interacting with social positions, including gender and sexual identity, to produce long-term, cumulative effects on mental health outcomes (Fredriksen-Goldsen, Simoni, et al., 2014). According to the model, key life experiences, such as military service experiences, may have potential long-term effects on mental health, specifically within gender and sexual minority populations. The model highlights the importance of examining key life experiences and the interplay of both health risk and health-promoting pathways to better understand mechanisms of optimal aging among transgender older adults.

Researchers have not typically accounted for the role of military service in studies of aging and health outcomes in later life (Settersten, 2006); gender identity is largely absent in studies of military service (Gates & Herman, 2014) and aging (Institute of Medicine, 2011). This may lead to omitted variable bias—findings that underestimate or overestimate the impact of variables being tested (Wilmoth & London, 2016). The importance of recognizing these trends is emerging. For example, compared with their nonveteran counterparts, women veterans aged 80 and older are disadvantaged in many aspects of health and well-being, including lower life satisfaction, quality of life, and physical health (LaCroix et al., 2016). A study of 5,135 transgender veterans (identified by ICD-9-CM codes) accessing health care services from the Veterans Administration (VA) found they had significantly higher rates of depression than their nontransgender counterparts (G. R. Brown & Jones, 2016). Yet the effects of military service experience on mental well-being among transgender older adults are not well studied.

Social positions are influenced by sociocultural contexts that differentially affect health and health outcomes (Fredriksen-Goldsen, Simoni, et al., 2014). Lower social positioning increases the likelihood of experiencing a broader array of stressors, and the impact of those stressors may be more intense (Blazer & Hybels, 2005), increasing the risk for poor mental health. Gender nonconformity is understood as outward expressions of gender (e.g., dress, behavioral mannerisms) that are incongruent with normative cultural expectations. In contrast, gender identity refers to individuals' internal sense of themselves as gendered—woman, man, or something else, regardless of gender assigned at birth. Broadly defined, transgender refers to individuals whose gender identity is incongruent with the gender they were assigned at birth, whether or not they are gender conforming or nonconforming. Regardless of one's gender identity, gender nonconformity is a significant risk factor for social marginalization (Fredriksen-Goldsen, Simoni, et al., 2014). Gender conformity is rigidly regulated and behaviorally disciplined in the military. Gender nonconformity increases risk for individual-level stressors such as microaggressions, victimization, abuse (Gordon & Meyer, 2007; Toomey, Ryan, Diaz, Card, & Russell, 2010), and poor mental health outcomes, such as depression among older male veterans (Yang & Burr, 2016).

Military service may further interact with stressors that have been negatively associated with mental health, even those predating military service. Identity stigma, the internalization of prevailing societal attitudes and beliefs relative to dominant and stigmatized groups, is a major stressor

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associated with depression among transgender older adults (Fredriksen-Goldsen et al., 2013). Identity stigma has been characterized as insidious trauma (Szymanski & Balsam, 2011). When experienced in childhood or youth, such trauma can be classified as adverse childhood events (ACE). Compared with their gender conforming peers, gender nonconforming youth also have a greater likelihood of being victims of sexual, physical, and emotional abuse, more typical forms of ACE (Toomey, McGuire, & Russell, 2012; Toomey et al., 2010). Early ACE may "sensitize" individuals to be more reactive to stressors later in life, increasing their risk for poor mental health outcomes (Sachs-Ericsson, Joiner, Cougle, Stanley, & Sheffler, 2016). In a population-based study, Montgomery, Cutuli, Evans-Chase, Treglia, and Culhane (2013) found that the relationship between ACE and poor mental health outcomes was stronger among adults with a history of military service compared with those without such a history, indicating a moderating effect of military service on mental health.

Mental health, the absence of mental illness and the presence of psychological well-being, is integral to successful aging (Westerhof & Keyes, 2010), and as such can be described as a desired positive outcome of the HEPM—progress toward achieving health equity. Recent dialogues within optimal aging perspectives argue that both objective and subjective components are required to capture the multidimensionality of mental health in successful and healthy aging (Pruchno, Wilson-Genderson, & Cartwright, 2010), a critical aspect of health equity. Objective measures assess the presence of mental illness symptomatology, including depressive symptoms. Subjective measures, on the other hand, assess the global subjective evaluation of psychological health-related quality of life (HRQOL). These two components are related to each other in that the presence of depressive symptomatology may affect one's subjective evaluation of psychological HRQOL. In the general older adult population, depression is associated with significant emotional distress and reduced HRQOL (Blazer, 2003; Blazer & Hybels, 2005; P. J. Brown & Roose, 2011). Depressive disorders and subsyndromal symptomatology may lower one's capacity to enjoy and positively evaluate quality of life. In a sample of veterans, Pittman, Goldsmith, Lemmer, Kilmer, and Baker (2012) found that depression was a significant predictor of psychological but not physical HRQOL. Transgender older adults have been found to have higher depressive symptomatology (Fredriksen-Goldsen et al., 2013) and lower mental health quality of life (Fredriksen-Goldsen, Kim, Shiu, Goldsen, & Emlet, 2015), than their nontransgender lesbian, gay, and bisexual counterparts, who themselves experience significantly poorer mental health than their heterosexual age peers (Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013).

In summary, prior research suggests that military service may be inversely associated with depression but that influence does not last beyond 10 years postservice separation. Identity stigma may be a source of early-life and current trauma; military service may exacerbate this influence on depression. Furthermore, depression has been found to predict lower HRQOL. We examine the relationships between prior military service, identity stigma, depressive symptomatology, and psychological HRQOL among transgender older adults. We anticipate (a) prior military service and identity stigma will be positively related with depressive symptomatology and negatively with psychological HRQOL; (b) depressive symptomatology will explain the associations between prior military service and identity stigma with psychological HRQOL; and (c) prior military service will moderate the relationships between identity stigma and depressive symptomatology, increasing the strength of the association between identity stigma and depressive symptomatology.

Design and Methods

Data Collection and Study Sample

We conducted cross-sectional analyses of data 2014 from Aging with Pride: National Health, Aging, and Sexuality/Gender Study (NHAS), a national longitudinal survey of 2,450 lesbian, gay, bisexual, or transgender (LGBT) older adults. Participants were recruited through 17 community agencies located throughout the United States and participants' social networks. Inclusion criteria for participation included being aged 50 or older; self-identification as LGBT; or engaged in a sexual or romantic relationship with someone of the same sex or gender. The 2014 survey was offered on paper or via the Internet; participants were paid $20 for their time. In the present study, we focused on the subsample of transgender participants (n = 186). This included 159 participants who self-identified as transgender; 13 participants who did not self-identify as transgender but whose biological sex at birth and current gender were incongruent; and 14 participants who did not self-identify as transgender but reported the age at which they first considered themselves transgender. We excluded three cases from the final sample due to nonresponse on the item assessing prior military service, making the final sample size 183.

Measures

Prior military service was assessed with the item, "Have you ever served in the military?". Responses were binary coded (0 = *no*, 1 = *yes*).

Identity stigma (Fredriksen-Goldsen & Kim, 2017) was assessed with the mean of four items regarding negative feelings about one's sexual or gender identity (e.g., "I feel that being LGBT is a personal shortcoming for me"), rated on a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). Higher mean scores indicated greater identity stigma (α = .68).

Depressive symptomatology was assessed with a short version of the Center for Epidemiological Studies Depression Scale (CES-D; Andresen, Malmgren, Carter, & Patrick, 1994), a 10-item measure, assessing the frequency of experiencing symptoms (e.g., "I felt depressed") over the

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past week (0 = *less than 1 day*, 3 = *5–7 days*). Ratings are summed across the items to create a continuous score ranging 0–30; higher scores indicate greater depressive symptomatology (α = .85).

Psychological HRQOL was measured by the psychological domain of the World Health Organization Quality of Life-BREF (WHOQOL-BREF; Bonomi, Patrick, Bushnell, & Martin, 2000). On the 6-item psychological domain, participants indicate their level of agreement to questions about their health and quality of life (1 = *not at all/very dissatisfied/never*, 5 = *extremely/completely/very satisfied/always*). For example, "Do you have enough energy for everyday life?". A summary score was created following the formula recommended in the user manual (WHOQOL Group, 1998), with higher scores representing higher psychological HRQOL (α = .83).

Background characteristics included age in years, current gender (man, woman, something else), race/ethnicity (non-Hispanic White or person of color), income (more than or less than 200% of the federal poverty level [FPL]), and education (high school or less, or more than high school).

Data Analysis

Analyses were conducted in Stata (version 14). In order to reduce sampling bias and increase the generalizability of the findings, we applied survey weights to statistical analyses. Survey weights were computed utilizing three external probability samples' data as benchmarks following two-step postsurvey adjustment, as has been applied to other types of nonprobability samples (Lee, 2006; Lee & Valliant, 2009). In the first step, the Aging with Pride: NHAS sample was combined with the National Health Interview Survey (NHIS) sample ascertaining sexual orientation by sexual identity, and we computed the probability of being selected from the NHIS versus the Aging with Pride: NHAS sample by using a logistic regression model with age, gender, sexual orientation, Hispanic ethnicity, race, education, region, and home ownership as covariates. In the second step, we further calibrated the weights for those in same-sex relationships, another indicator of sexual orientation. The population totals by age, race/ethnicity, gender, education, marital status, and region were estimated from the NHIS, the American Community Survey (ACS), and the Health and Retirement Study (HRS). See Fredriksen-Goldsen and Kim (2017) for detailed information regarding the postsurvey adjustment procedures.

Background characteristics were examined by prior military service; significant differences between transgender older adults with and without prior military service were identified. To test our hypotheses, we conducted analyses in the following order. In Step 1, we used multivariate linear models to regress psychological HRQOL and CES-D scores on identity stigma, prior military service, and other background characteristics to test whether identity stigma and prior military service were independently associated with the two mental health outcomes in separate regression models. In Step 2, to test whether the relationships among identity stigma, prior military service, and psychological HRQOL could be explained by CES-D scores, we further used multivariate linear model in which we entered identity stigma, prior military service, and background characteristics as the first block, and CES-D scores as the second block. If the associations among identity stigma, prior military service, and psychological HRQOL were substantially reduced due to entering CES-D into the model, this indicated that CES-D scores could at least partially explain associations among identity stigma, prior military service, and psychological HRQOL. Finally, in Step 3, we created an interaction term with identity stigma and prior military service and entered it into the model with CES-D scores as the outcome to test whether prior military service would moderate the relationship between identity stigma and CES-D scores.

Results

Table 1 summarizes the descriptive and bivariate analyses of transgender older adults with and without prior military service. Overall, depressive symptomatology among transgender older adults was moderately high at 9.00, and psychological HRQOL was moderate at 64.12. On average participants were 60.11 years old. Close to half of transgender older adults identified as women, 28% as men, and 26% as something else. Slightly more than 60% identified as non-Hispanic White; more than 40% lived at or below 200% of FPL; and one quarter had high school education or less. Overall, 22% reported having had prior military experience. On average, those with prior military service had significantly lower levels of depressive symptomatology (p = .039) and higher psychological HRQOL (p = .022), compared with those without prior military service. None of the selected background variables were significantly different between the two groups at .05 levels. Table 2 summarizes the results of the multivariate linear regression models. Identity stigma and prior military service were significantly associated with both mental health outcomes in Model 1. Specifically, when identity stigma increased by 1 unit, CES-D scores increased by 2.99 units ($p < .01$), whereas psychological HRQOL decreased by 8.83 units ($p < .01$), even when controlling for military service and background characteristics. On average, compared with their peers without prior military service, transgender older adults with prior military service had significantly lower CES-D scores by 2.78 units ($p < .05$) and higher psychological HRQOL by 8.12 units ($p < .05$). In Model 2 with psychological HRQOL as the outcome, when CES-D scores were entered into the model, identity stigma and military service were no longer significantly associated with psychological HRQOL. The finding suggested that CES-D scores had significantly explained the relationships among identity stigma, prior military service, and psychological HRQOL.

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Table 1. Background Characteristics of Transgender Older Adults by Prior Military Service

Background characteristics	Total	Ever military service	No military service	Significance test
	M or % (95% CI)	*M* or % (95% CI)	*M* or % (95% CI)	
Raw *n*	183	43	140	
Outcome variables				
Depressive scores	9.00 (7.71, 10.29)	7.00 (4.80, 9.20)	9.80 (8.31, 11.30)	$F = 4.28$, $p = .039$
Psychological HRQOL	64.12 (60.39, 67.84)	70.30 (64.52, 76.08)	61.82 (57.43, 66.22)	$F = 5.24$, $p = .022$
Background characteristics				
Age	60.11 (58.81, 61.42)	62.86 (59.11, 66.61)	59.24 (57.99, 60.49)	$F = 3.22$, $p = .073$
Current gender				$F = 0.79$, $p = .454$
Women	46.88 (37.24, 56.76)	56.60 (35.84, 75.28)	44.08 (33.34, 55.40)	
Men	27.48 (19.55, 37.14)	17.38 (6.38, 39.39)	30.39 (21.12, 41.58)	
Something else	25.64 (17.89, 35.30)	26.01 (11.62, 48.46)	25.53 (16.95, 36.55)	
Race/ethnicity				$F = 0.12$, $p = .729$
People of color	32.01 (23.41, 42.05)	29.01 (14.18, 50.28)	32.88 (23.06, 44.47)	
Non-Hispanic White	67.99 (57.95, 76.59)	70.99 (49.72, 85.82)	67.12 (55.53, 76.94)	
Income				$F = 0.10$, $p = .757$
≤200 FPL	41.43 (31.97, 51.57)	38.59 (21.01, 59.76)	42.28 (31.51, 53.85)	
>FPL	58.57 (48.43, 68.03)	61.41 (40.24, 78.99)	57.72 (46.15, 68.49)	
Education				$F = 1.81$, $p = .181$
>HS	74.17 (63.63, 82.49)	87.00 (60.68, 96.67)	70.48 (58.37, 80.26)	
≤HS	25.83 (17.51, 36.37)	13.00 (3.33, 39.32)	29.52 (19.74, 41.63)	

Note: CI = confidence interval; FPL = federal poverty level; HRQOL = health-related quality of life; HS = high school. Weighted estimates presented.

Table 2. Results of Multivariate Linear Regression With CES-D Scores and Psychological HRQOL as Outcomes

	CES-D scores		Psychological HRQOL			
	Model 1		Model 1		Model 2	
Predictor variables	*b*	*SE*	*b*	*SE*	*b*	*SE*
Identity stigma	2.99**	0.72	−8.83**	2.07	−2.54	1.34
Military service (yes vs no)	−2.78*	1.40	8.12*	3.91	2.04	2.75
CES-D scores	—	—	—	—	−2.13**	0.18

Note: CES-D = Center for Epidemiological Studies Depression Scale; HRQOL = health-related quality of life. All estimations adjusted for background characteristics.
*$p < .05$; **$p < .01$.

Table 3. Moderation Effects of Prior Military Service on the Relationships between Identity Stigma and CES-D Scores

Predictor variables with interaction term	Model 1		Model 2	
	b	*SE*	*b*	*SE*
Identity stigma	2.99**	0.72	3.70**	0.80
Prior military service	−2.78*	1.40	2.44	2.77
Gender				
Men (vs women)	−1.59	1.30	−1.13	1.18
Something else (vs women)	1.88	1.51	2.65	1.52
Identity stigma × prior military service	—	—	−2.80*	1.38

Note: CES-D = Center for Epidemiological Studies Depression Scale. All estimations adjusted for background characteristics.
*$p < .05$; **$p < .01$.

Table 3 summarizes the results of multivariate linear regression with an additional interaction term between identity stigma and prior military service. The results showed that the interaction term was significant at the .05 level as presented in Model 2, suggesting that prior military service moderated the relationship between identity stigma and CES-D scores. Figure 1 depicts the relationships between identity stigma and model-adjusted CES-D scores by prior military service experience. As illustrated, the solid line represents the slope ($b = 3.70$, $p < .01$) between identity stigma and CES-D scores for transgender older adults without prior military service, which is significantly steeper (design-adjusted $F(1, 2441) = 4.15$, $p < .05$) than the dashed line that represents the slope ($b = 0.90$, $p = .45$) between identity stigma and CES-D scores for those with prior military service.

Discussion

Researchers are increasingly recognizing transgender older adults as a distinct population. Acknowledgement of the unique nature of gender identity in the experiences of transgender individuals in the military dates back nearly three decades (G. R. Brown, 1988), yet military service has typically been overlooked as an important variable in transgender and aging studies. This study is among the first to specifically explore the roles of prior military service in

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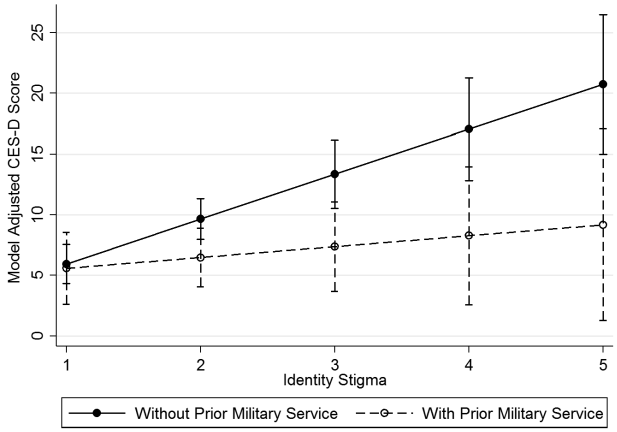

Figure 1. Moderation effect of prior military service on the relationship between identity stigma and Center for Epidemiological Studies Depression Scale (CES-D) scores.

the mental health of transgender older adults in relation to identity stigma. Our results suggest that previous military service and identity stigma play a complex role in the mental health of transgender older adults. It is important to recognize that the transgender older adults in this study with prior military service enjoy better mental health (lower levels of depression, better psychological HRQOL) compared with their peers without prior military service. It will be important for future researchers to consider access to VA services for transgender individuals, selection into military service, and access to other benefits as potential mechanisms by which military service might exert its apparent beneficial effects on mental health, which the current study was unable to do.

Our expectation that prior military and identity stigma would be positively related to depressive symptomatology and negatively related to psychological HRQOL was partially supported. Identity stigma was positively associated with depressive symptomatology and negatively with psychological HRQOL, congruent with previous findings on these relationships among transgender older adults (Fredriksen-Goldsen et al., 2013, 2015). Unexpectedly, we found that prior military service was associated with lower depressive symptomatology and greater psychological HRQOL, in contrast to much previous research that has typically cast military service primarily in terms of negative outcomes. This supports an emerging body of evidence suggesting that military service may in fact foster post-traumatic growth—essentially fostering resilience through adversity, not despite adversity (Spiro et al., 2016). One avenue by which such growth might be fostered via military service is through the development of internal strengths and group cohesion (Tedeschi & Calhoun, 2004). Another explanation could be related to racial and ethnic minority veterans who evidence post-traumatic growth via access to new life possibilities subsequent to military service (Maguen, Vogt, King, King, & Litz, 2006).

Military service could also provide time and space for the incubation of transgender identities. The desire to leave behind a stigmatized gender identity has been characterized as a motivating factor for transgender individuals to enter the military (G. R. Brown, 1988). It is plausible that based on their military experience, some transgender service members might recognize the futility of trying to live their assigned sex at birth and move toward greater acceptance of their true sense of gender expression and self. In tandem with post-traumatic growth, this idea is exemplified in Fabbre's (2015) qualitative study of transgender women contemplating or engaging in gender transition later in life. Characterized as "success on new terms," Fabbre (2015) describes how "years later, many transgender women are… able to integrate their experiences in the military, which constrained their gender identity, with a process of accepting and nourishing this same identity later in life" (p. 150).

Our hypothesis that the relationships between psychological HRQOL and prior military service and identity stigma can be explained by depressive symptomatology was supported. In our analyses, depressive symptomatology fully explained these relationships, suggesting that depressive symptomatology may be associated with prior military service and identity stigma as well as psychological HRQOL among transgender older adults. Military service has been characterized as a "highly challenging life circumstance" (Tedeschi & Calhoun, 2004). When stressors are experienced as challenges to be met rather than threats beyond one's ability to cope, positive psychological adaptation is likely to occur.

Although a significant proportion of transgender veterans experience significantly higher rates of major depression than nontransgender veterans, the majority do not (G. R. Brown & Jones, 2016). It would appear that for a subset of transgender older adults, military service is protective against depressive symptomatology and its negative impact on psychological HRQOL, as discussed by P. J. Brown and Roose (2011) and others. Kimmel (1978) and Friend (1991) described "crisis competence" as the transference of positive adaptation that sexual minorities may develop through successfully navigating stigmatizing social contexts, transferring that competence to other challenging domains of life. Transgender individuals who are able to develop competence within the inherently heterosexist context of the military are likely to carry that competence into later life and other domains. It would make sense that post-traumatic growth and crisis competence accruing through military service would contribute to a more agentic sense of self and consequent decreased identity stigma producing an overall moderating effect through the interaction of military service and identity stigma.

Our hypothesis that prior military service would moderate the relationships between identity stigma and depressive symptomatology was not supported. We expected that prior military service might heighten the detrimental effects of identity stigma on mental health among transgender

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older adults. As shown in our results, prior military service was associated with identity stigma and moderated the relationship between identity stigma and depressive symptomatology. However, contrary to our expectation, prior military service provided a buffering effect against the negative effect of identity stigma on mental health among transgender older adults. This may be due to the fact that increased autonomy, mastery, and coping skills are important internal strengths and essential components of military training (Spiro et al., 2016). Such a bundling of psychological resources could contribute to a process whereby a negatively appraised gender identity becomes more positively appraised, with a consequently enhanced sense of a resilient self, eventually resulting in better mental health outcomes (Unger, 2000). Alternately, these results could also be attributed to potential selection biases, in which transgender older adults who experienced traumatic discrimination in the military may not have disclosed their identities after military service. Moreover, transgender older adults who entered military service may have differed in important ways already, including identity factors, from those who chose not to enter military in their earlier development.

This study provides insights into how prior military service may contribute to resilience and better mental health outcomes among transgender older adults. On June 30, 2016, the United States joined 18 other countries in allowing transgender Americans to serve openly in the military (Schaefer et al., 2016). Elders, Brown, Coleman, Kolditz, and Steinman (2015) have noted that this change will vastly improve access to health care for active duty and veteran transgender service members. It will also allow military commanders to better provide for their troops. Understanding how military service influences mental health can provide much-needed evidence to inform implementation of policies that will support transgender individuals to continue to serve honorably—and now visibly in the U.S. armed forces.

Limitations

Our study findings need to be interpreted in the light of potential limitations of the study design. First, transgender older adults are among the most "hard to reach" populations, and findings are likely skewed by selection into military service, a significant issue. Due to the small, self-selected sample ($n < 200$) of transgender individuals who have survived into later life, results of this study cannot be generalized. We were able to test the hypotheses, although estimations are conservative. The original study was not designed to have power to detect the effects of prior military service by gender; therefore, larger sample sizes are needed for both genders to make meaningful comparisons in this population. Second, in our study, we only considered the presence or absence of prior military service among transgender older adults, without measuring the specific experiences in the military. Therefore, we were unable to identify potential mechanisms that resulted in the positive effects of prior military service on mental well-being among transgender older adults. Finally, this study utilized cross-sectional survey data, and hence, our study results were correlational in nature. Future research efforts that aim to explore military service experiences among transgender older adults and evaluate the impacts of military service experience on their mental well-being will benefit from longitudinal study designs with special efforts in recruiting larger diverse samples of transgender older adults as well as adopting measurements that capture experiences during military service.

Conclusion

Transgender lives are becoming increasingly visible in the 21st century, and have many served their country honorably through military service. Historically marginalized, transgender individuals are finally able to serve openly in the military. Findings from this study offer preliminary evidence that military service may be positively associated with mental health and optimal aging for some transgender service members. Identifying underlying pathways and mechanisms by which military service interacts with other factors to influence mental health among transgender older adults will be instrumental in developing appropriate, sensitive interventions for this underserved population.

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